

WHAT IS CLAIMED IS:

1. A carrying case for carrying a heated article, said case comprising:

a plurality of walls including spaced-apart sidewalls joined by a back wall at a trailing end and further joined by top and bottom walls to define a volume sized to receive said article, said walls further defining an opening at a leading end for access to said volume;

said walls formed of thermally insulative material;

a cover hingedly secured to an edge of one of said top and bottom walls for said cover to pivot between an open and a closed position, said cover in said closed position covering said opening;

flexible side flaps secured to respective ones of said sidewalls and to said cover, said side flaps including folds for urging said side flaps inwardly into said opening as said cover is moved to said closed position.

2. A carrying case according to claim 1 wherein said walls are formed of panels of thermally insulative material disposed between flexible material.

3. A carrying case according to claim 2 wherein said side walls and said rear wall are divided into upper and lower panels with a flexible fold line extending between said panels.

4. A carrying case according to claim 1 further comprising:

a first strap having opposite ends extending around separate ones of said sidewalls;

said strap sized to extend around a neck of a user with said rear wall opposing a waist of said user.

5. A carrying case according to claim 1 further comprising:

first and second V-shaped straps having apexes secured to said ends of said first strap;

ends of said V-shaped straps secured to said base with said ends of said V-shaped straps spaced-apart on opposite sides of a longitudinal mid-point of said base.

6. A thermal storage assembly comprising:

a heat retention member for absorbing and retaining sensible heat and for releasing said sensible heat over extended periods of time;

a heating coil assembly secured to a surface of said heat retention member, said heating coil assembly including a resistive heating coil disposed over an area substantially equal to an area of said heat retention member, said coil disposed within a sealed thermally conductive pouch;

a power cord extending into said thermally conductive pouch with an internal end of said cord secured to said coil, an external end of said cord having means for releasable connection to a source of electric power.

7. A thermal storage assembly according to claim 6 wherein said heat retention member includes a sealed

plastic pouch containing a solid open cell foam and a liquid.

8. A thermal storage assembly according to claim 6 wherein said heat retention member includes a sealed pouch containing a phase change material for storing heat as latent heat of a phase change.

9. A thermal storage assembly according to claim 6 further comprising:

a rigid base having a surface area greater than an area of said heating coil assembly;

said heating coil assembly and heat retention member secured to said base with said coil assembly disposed between said base and said heat retention member, said coil assembly and heat retention member covering only a portion of said base to define an uncovered portion of said base;

a thermally conductive material extending from a location adjacent said heating coil assembly to cover said uncovered portion for conducting heat from said heating coil assembly throughout said uncovered portion.

10. A thermal storage assembly according to claim 9 further comprising a thermally insulating foam disposed between said base and said thermally conductive material.

11. A thermal storage assembly according to claim 9 wherein said thermally conductive material is a metallic foil.

12. An apparatus for storing a heated article, said apparatus comprising:

a case having walls defining an interior volume sized to receive said article, said walls further defining an opening for access to said volume;

a cover for closing said opening;

a heating sub-assembly disposed within said volume and having:

a heat retention member for absorbing and retaining sensible heat and for releasing said sensible heat over extended periods of time;

a heating coil assembly secured to a surface of said heat retention member, said heating coil assembly including a resistive heating coil disposed over an area substantially equal to an area of said heat retention member, said coil disposed within a sealed thermally conductive pouch;

a power cord extending into said pouch with an internal end of said cord secured to said coil, an external end of said cord having means for releasable connection to a source of electric power.

13. An apparatus according to claim 12 further comprising an interior wall within said volume for dividing said volume into a first sub-chamber sized to receive said article and a second-chamber sized to receive said heating sub-assembly.

14. An apparatus according to claim 12 wherein:

said walls include spaced apart sidewalls joined by a back wall at a trailing end and further joined by top and bottom walls to define said, said walls further defining said opening;

said walls formed of thermally insulative material;

said cover hingedly secured to an edge of one of said top and bottom walls for said cover to pivot between an open and a closed position, said cover in said closed position covering said opening;

15. An apparatus according to claim 14 further comprising flexible side flaps secured to respective ones of said sidewalls and to said cover, said side flaps including folds for urging said side flaps inwardly into said opening as said cover is moved to said closed position.

16. An apparatus according to claim 15 wherein said interior wall is disposed in overlying relation to said bottom wall.

17. An apparatus according to claim 15 wherein one of said side flaps is releasably secured to said cover with fastening means to permit said cord to extend between said one of said flaps and said cover.

18. An apparatus according to claim 12 wherein:

said heating sub-assembly includes a rigid base having a surface area greater than an area of said heating coil assembly;

said heating coil assembly and heat retention member secured to said base with said coil assembly disposed between said base and said heat retention member, said coil assembly and heat retention member covering only a portion of said base to define an uncovered portion of said base;

a thermally conductive material extending from a location adjacent said coil assembly to cover said uncovered portion for conducting heat from said assembly throughout said uncovered portion.

19. An apparatus according to claim 18 wherein said sub-assembly is disposed in said volume with said uncovered portion positioned adjacent a trailing end of said volume.

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